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动物分类学报

贵州沟螺属一新种记述 (前鳃亚纲，中腹足目，环口螺科)

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摘　要　在整理贵州省荔波县茂兰喀斯特森林自然保护区陆生贝类标本时，经鉴定发现 1 新种，即茂兰沟螺 *Dioryx madanensis* sp. nov.，文中对新种形态特征、栖息环境进行了描述，并对其相似种进行了分析和讨论。

关键词　前鳃亚纲，中腹足目，环口螺科，沟螺属，新种.
中图分类号　Q959.212

在整理贵州省荔波县茂兰喀斯特森林自然保护区陆生贝类标本时，经鉴定发现环口螺科、沟螺属 1 新种，即茂兰沟螺 *Dioryx maolanensis* sp. nov.，报道如下。

茂兰沟螺，新种 Dioryx maolanensis **sp. nov.** (图 1～6)

正模标本，壳高 5.16 mm，壳宽 4.16 mm，壳口直径 1.33 mm。副模标本 6 个，壳高 4.50～5.33 mm，壳宽 3.5～5.16 mm，壳口直径 1.00～1.67 mm，壳口宽 1.33 mm，2001 年 7 月 9 日采自贵州省荔波县茂兰石灰岩森林中。正、副模标本均保存在中国科学院动物研究所 (北京)。





图 1～2　茂兰沟螺，新种 *Dioryx maolanensis* sp. nov.
1. 贝壳侧面观 (lateral view of shell)　2. 贝壳右侧面观 (right lateral view of shell)

贝壳小型，右旋，壳质厚，坚实，呈圆球形，有 3 $\frac{1}{2}$ 个螺层，各螺层均膨胀，体螺层特膨大，但至壳口处紧缩，呈 1 凹槽。壳顶钝，胚螺层光滑，缝合线深。壳面呈淡黄色，陈旧标本呈灰白色，并有稀疏而明显成纵行排列的近乎肋状条纹的生长线。在体螺层背侧面靠近壳口处缝合线上有 1 细管状的呼吸管 (长 0.83～1.00 mm)。壳口呈圆形，口缘外折并延长，形成约 0.8 mm 的口颈部，口唇厚，外卷形成双唇，其边缘锋利，并与体螺层分离。厣较厚为角质，黄褐色，与壳口同大，半透明，有 3 层，

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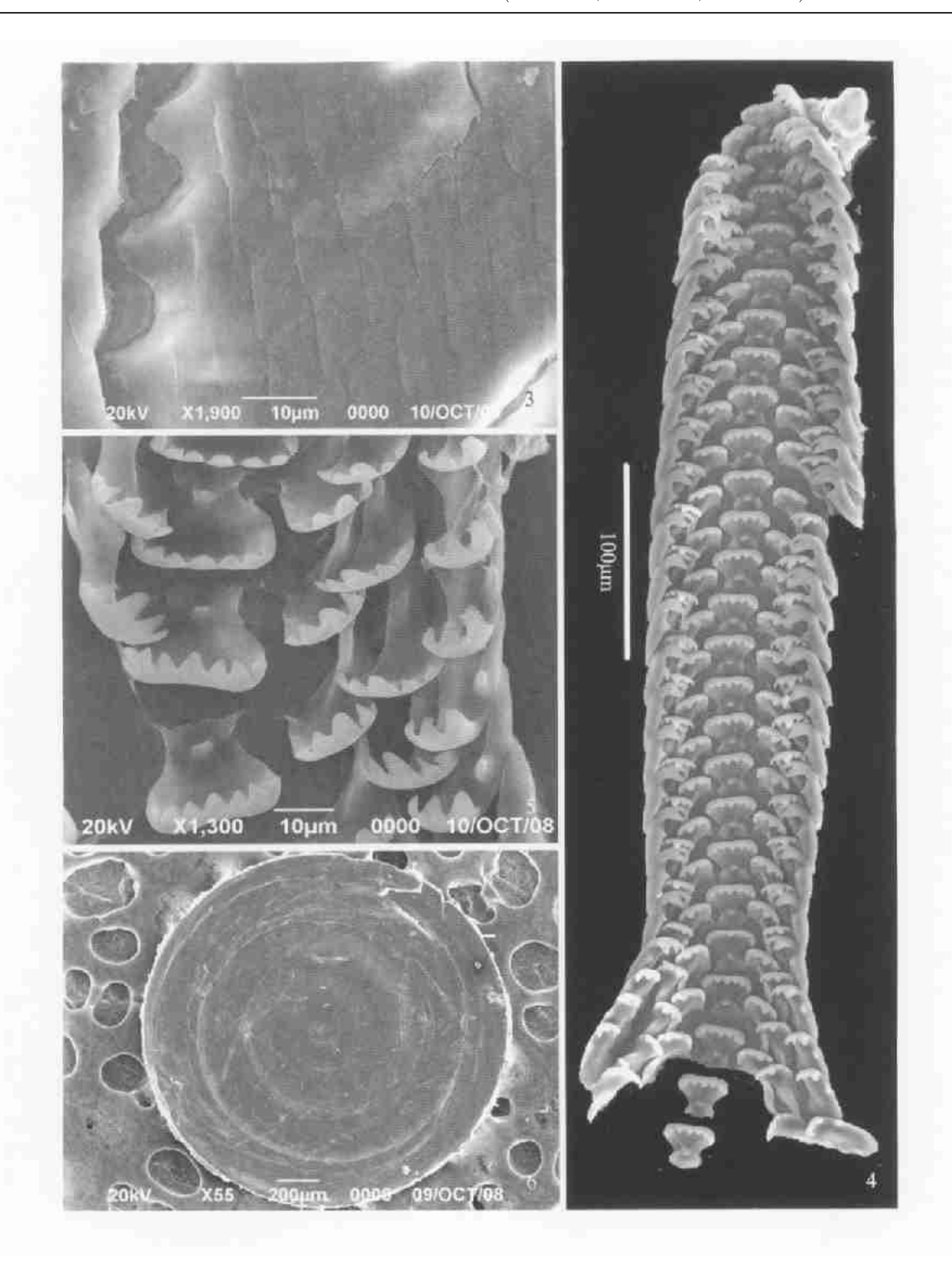


图3~6 茂兰河螺, 新种 *Dioryx maolanensis* sp. nov.
3. 颚片(jaw) 4. 齿舌(radula) 5. 齿舌放大(radula enlarged) 6. 厣(operculum)

内层无螺旋纹, 光滑, 外层有一核心, 并有明显的螺旋纹。脐孔小而深, 略被小轴缘遮盖, 呈缝隙状。颚片薄片状, 透明, 其表面布满鳞片状结构。齿舌呈带状, 角质, 有中央齿1枚, 其尖端有7枚小齿; 侧齿2枚, 其尖端有5枚小齿; 缘齿2枚, 其尖端有4枚小齿。

栖息环境 常生活在阴暗潮湿多石灰岩的山区和丘陵地带, 一般栖息于石灰岩多腐殖质的缝隙、松软潮湿的土壤表面, 落叶、腐木或石块下。

讨论 新种与乳阳沟螺 *Dioryx ruyangensis* Hu, Yin and Chen, 2004 相近似, 但新种贝壳较小(壳高5.16 mm, 壳宽4.16 mm, 壳口直径1.33 mm), 有3 $\frac{1}{2}$个螺层, 呼吸管长0.83~1.00 mm, 壳面有稀疏而明显成纵行排列的近乎肋状条纹和生长线, 颚片薄片状, 透明, 其表面布满鳞片状结构。齿舌呈带状,

角质, 有中央齿 1 枚, 其尖端有 7 枚小齿, 侧齿 2 枚, 其尖端有 5 枚小齿, 缘齿 2 枚, 其尖端有 4 枚小齿。后者个体较大 (壳高 7.10 mm, 壳宽 5.50 mm, 壳口直径 1.75 mm), 有 4~ 4 $\frac{1}{2}$个螺层, 呼吸管长 2.80 mm。壳面无成纵行排列的近乎肋状条纹和生长线。故有所区别。

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A NEW SPECIES OF THE GENUS DIORYX BENSON FROM CHINA (PROSOBRANCHIA, MESOGASTROPODA, CYCLOPHORIDAE)

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Abstract This paper deals with a new species of the genus *Dioryx* collected from Guizhou Province, China. Type specimens are deposited in the Institute of Zoology, Chinese Academy of Science, China.

Dioryx maolanensis **sp. nov.** (Figs. 1-6)

Holotype, alt. 5.16 mm, diam. 4.16 mm, diam. of aperture 1.33 mm. Paratypes 6 specimens, alt. 4.50-5.33 mm, diam. 3.5-5.16 mm, diam. of aperture 1.00-1.67 mm, collected from Maolan Town, Libo County (25°03′N, 108°00′E), Guizhou Province, China, 9 July 2001.

Shell small, dextral, thick, globose conoid. Whorls 3 $\frac{1}{2}$, moderately convex, spire high, body whorl very convex. Shell yellowish in colour, worn specimens ashen-white, surface with very distinct vertically thin ribbed-line and growth line, protoconch smooth, without spiral line. Apex blunt. Suture deep, with a 0.83-1.00 mm worm-form projection at suture of body whorl. Aperture circular, thick, with two lips, somewhat expanded and reflexed. Operculum circular, cuticular, yellow brown in colour, and the inner surface has papule-form projection, and concentric circles lines indistinct visible in the surface. Umbilicus small, crevice-formed. Jaw thin flake-shaped, transparent, the surface with scale-shaped structure. The radula tape-shaped, circular, with 1 central tooth, and with 7 smaller cusps on apex; 2 lateral teeth, and with 5 smaller cusps on apex; 2 marginal teeth, and with 4 smaller cusps on apex.

This new species is similar to *Dioryx ruyangensis* Hu, Yin and Chen, 2004, but differs obviously from the latter in the small size; the shell with whorls 3 $\frac{1}{2}$, length 5.16 mm, diam. 4.16 mm; diam of aperture 1.33 mm; surface of shell with very distinct vertically thin ribbed-line and growth line, with a 0.83-1.00 mm worm-form projection at suture of body whorl. Jaw thin flake-shaped, transparent, the surface with scale-shaped structure. The radula tape-shaped, circular, with 1 central tooth, and with 7 smaller cusps on apex; 2 lateral teeth, and with 5 smaller cusps on apex; 2 marginal teeth, and with 4 smaller cusps on apex. The shell of the latter species with whorls 4-4 $\frac{1}{2}$, length 7.10 mm, diam. 5.50 mm; diam of aperture 1.75 mm; with a 2.80 mm worm-form projection at suture of body whorl.

Key words Prosobranchia, Mesogastropoda, Cyclophoridae, *Dioryx*, new species.

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